

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Stanley Birchfield et al.

APPLICATION NO.: 09/922,370

FILING DATE: August 2, 2001

TITLE: ACOUSTIC SOURCE LOCALIZATION SYSTEM AND METHOD

EXAMINER: Unassigned

GROUP ART UNIT: 2862

ATTY. DKT. NO.: 21938-05581

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**CERTIFICATE OF MAILING**

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Dated: 11/6/01

By: *Edward A. Van Gieson*

Edward A. Van Gieson, Reg. No.: 44,386

COMMISSIONER FOR PATENTS  
WASHINGTON, DC. 20231

**INFORMATION DISCLOSURE STATEMENT**

**Under 37 CFR §§ 1.56 and 1.97-98**

SIR:

Pursuant to the provisions of 37 CFR §§ 1.56 and 1.97-98, enclosed herewith is modified form PTO-1449 listing references for consideration by the Examiner. A copy is enclosed herewith of each listed reference which may be material to the examination of this application, and with respect to which there may be a duty to disclose.

The filing of this Information Disclosure Statement shall not be construed as a representation regarding the completeness of the list of references, or that inclusion of a reference in this list is an admission that it is prior art or is pertinent to this application, or that a search has been made, or as an admission that the information listed is, or may be considered to be, material to patentability, or that no other material information exists, and shall not be construed as an admission against interest in any manner.

☐ This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application Serial No. [SERIAL NUMBER], filed on [FILING DATE], and the

references cited therein are hereby referenced, but are not required to be provided in this application under 37 CFR § 1.98(d).

The Information Disclosure Statement submitted herewith is being filed:

- ☒ within three months of the filing date of the application, or date of entry into the national stage of an international application, or before the mailing date of a first official action on the merits, whichever event last occurred;  
OR
- ☐ before the mailing of a first official action after the filing of a request for continued examination (RCE) under 37 CFR § 1.114;
- ☐ after three months of the filing date of this national application or the date of entry of the national stage in an international application, or after the mailing date of the first official action on the merits, whichever event last occurred, but before the mailing date of the first to occur of either:
  - (1) a final action under 37 CFR §1.113; OR
  - (2) a notice of allowance under 37 CFR §1.311; AND
- ☐ attached hereto is the fee of \$180, as set forth under 37 CFR §1.17(p), for submission of this Information Disclosure Statement under 37 CFR. § 1.97(c); OR
- ☐ Applicant certifies pursuant to 37 CFR § 1.97(e) that:
  - ☐ each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement;  
OR
  - ☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing this certification after making reasonable inquiry, was known to any individual designated under 37 CFR § 1.56(c) more than three months prior to the filing of this Statement.
- OR
- ☐ before the payment of the issue fee but after the mailing date of the first to occur of either:
  - [1] a final action under 37 CFR § 1.113; OR
  - [2] a notice of allowance under 37 CFR § 1.311; AND

in accordance with the requirements of 37 CFR § 1.97(d):

- ☐ Applicant certifies pursuant to 37 CFR. § 1.97(e) that:
  - ☐ each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; OR
  - ☐ no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing this certification after making reasonable inquiry, was known to any individual designated under 37 CFR § 1.56(c) more than three months prior to the filing of this Statement; AND
- ☐ Applicant hereby respectfully petitions for the consideration of the accompanying Information Disclosure Statement under 37 CFR § 1.97(d)(2); AND
- ☐ Applicant submits the petition fee of \$180 as set forth in 37 CFR § 1.17(p).


☐ Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application, and the communication was not received by any individual designated in 37 CFR § 1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement. 37 CFR § 1.704(d).

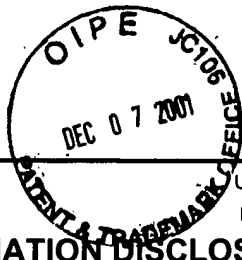
☒ Applicant submits that no fee is required for the consideration of the accompanying Information Disclosure Statement.

Consideration of the listed references and favorable action are solicited.

Respectfully submitted,  
STANLEY T. BIRCHFIELD ET AL.

Dated: 11/6/01

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FORM PTO-1449-  
(REV. 6-89)U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Attorney's Docket No.

21938-05581

Serial No.

09/922,370

**INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

Applicant

Stanley T. Birchfield et al.

Filing Date

August 2, 2001

Group Art Unit

2862

**U.S. PATENT DOCUMENTS**

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	A	4,581,758	4/8/86	Coker, et al.			
	B	5,465,302	11/7/95	Lazzari et al.			
	C	5,526,433	6/11/96	Zakarauskas et al.			
	D	5,737,431	4/7/98	Brandstein et al.			
	E	5,778,082	7/7/98	Chu et al.			
	F	5,959,667	9/28/99	Maeng			
	G	6,005,610	12/21/99	Pingali			

**RECEIVED**  
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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

	H	C.H. Knapp and G.C. Carter, "The Generalized Correlation Method for Estimation of Time Delay", <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , Vol. 24, No. 4, pp. 320-327, Aug. 1976
	I	M. Omologo and P. Svaizer, "Use of the Crosspower-Spectrum Phase in Acoustic Event Location", <i>IEEE Transactions on Speech and Audio Processing</i> , Vol. 5, No. 3, pp. 288-292, May 1997
	J	A. St��phenne and B. Champagne, "Cepstral Prefiltering for Time Delay Estimation in Reverberant Environments", <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , 1995, Vol. 5, pp. 3055-3058
	K	Y. Huang, et al., "Adaptive Eigenvalue Decomposition Algorithm for Realtime Acoustic Source Localization System", <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , 1999, Vol. 2, pp. 937-940
	L	M. S. Brandstein, et al., "A Closed-Form Method for Finding Source Locations From Microphone-Array Time-Delay Estimates", <i>Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing</i> , 1995, Vol. 5, pp. 3019-3022

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP   609; Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant.





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PTO/SB/21, (modified)  
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<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence during pendency of filed application)</i>	Application Number	09/922,370	
	Filing Date	August 2, 2001	
	First Named Inventor	Stanley T. Birchfield	
	Group Art Unit Number	2862	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	6*	Attorney Docket Number	21938-05581

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<b>REMARKS:</b> *Does not include page count of 17 references	

SIGNATURE OF ATTORNEY OR AGENT		
Signature:		
Attorney/Reg. No.:	Edward A. Van Gieson, Reg. No. 44,386	Dated: 11/6/01

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